



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

sn

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,730	03/16/2004	Sang-Yeon Pyo	1594.1369	1852

21171 7590 12/01/2004

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

GRAVINI, STEPHEN MICHAEL

ART UNIT PAPER NUMBER

3749

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

Address : COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

08

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
---------------------------------	-------------	---	---------------------

EXAMINER

ART UNIT	PAPER
----------	-------

20040914

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Office Action Summary

Application No.

10/800,730

Applicant(s)

PYO ET AL.

Examiner

Stephen Gravini

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 21-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a subcombination apparatus, classified in class 34, subclass 596.
- II. Claims 10-13, drawn to a subcombination apparatus, classified in class 68, subclass 12.01.
- III. Claims 14-20, drawn to a subcombination apparatus, classified in class 34, subclass 602.
- IV. Claims 21-22, drawn to a subcombination apparatus, classified in class 68, subclass 139.
- V. Claims 23-25, drawn to subcombination apparatus, classified in class 34, subclass 604.

The inventions are distinct, each from the other because of the following reasons:

Inventions of group I and groups II-V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of group I has separate utility such as having a condensing duct provided on an outer surface of the water tub, the condensing duct comprising at least one air guide therein to partition an inner space of the condensing duct into a plurality of condensing paths which communicate with each other in series. This feature is considered to patentably

Art Unit: 3749

distinguish the independently claimed group I invention from the other independently claimed inventions because that feature is unique and considered not to be found in the other independently claimed inventions. See MPEP § 806.05(d).

Inventions of group II and groups I & III-V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of group II has separate utility such as having a condensing duct provided on an outer surface of the water tub and an ultrasonic atomizing unit provided in an inlet part of the condensing duct to make fine water particles, thus promoting a condensation of vapor from air flowing through the condensing duct. This feature is considered to patentably distinguish the independently claimed group II invention from the other independently claimed inventions because that feature is unique and considered not to be found in the other independently claimed inventions. See MPEP § 806.05(d).

Inventions of group III and groups I-II & IV-V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of group III has separate utility such as having a water tub and a drying apparatus provided on an outer surface of the water tub, the drying apparatus comprising a condensing duct provided on a rear surface of the water tub and at least one air guide to partition an inner space of the condensing duct into a plurality of condensing paths which communicate with each other in series. This feature is considered to patentably distinguish the independently claimed group III invention from the other independently

claimed inventions because that feature is unique and considered not to be found in the other independently claimed inventions. See MPEP § 806.05(d).

Inventions of group IV and groups I-III & V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of group IV has separate utility such as having a condensing duct to condense vapor from air, the condensing duct having an air guide therein. This feature is considered to patentably distinguish the independently claimed group IV invention from the other independently claimed inventions because that feature is unique and considered not to be found in the other independently claimed inventions. See MPEP § 806.05(d).

Inventions of group V and groups I-IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of group V has separate utility such as having at least one air guide therein partitioning an inner space of the condensing duct into a plurality of condensing paths communicating in series with each other, wherein a first air guide and a second air guide longitudinally arranged in the condensing duct between sidewalls of the condensing duct, partition the inner space of the condensing duct into a first condensing path, a second condensing path and a third condensing path. This feature is considered to patentably distinguish the independently claimed group V invention from the other independently claimed inventions because that feature is unique and considered not to be found in the other independently claimed inventions. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is considered proper because examining each of the independently claimed invention would represent a serious burden upon the Office.

Since the restriction is considered complex and the examiner knows from past experience that an election will not be made by telephone, this written restriction is considered proper under MPEP 812.01

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant's election with traverse of group II claims 14-20 in the reply filed on October 15, 2004 is acknowledged. The traversal is on the grounds that it is believed that the claimed invention would be found in the same field of technology and no undue burden would exist to examine each of the considered independent and distinct invention together. This is not found persuasive because each of the embodiments are separately claimed as independent inventions showing that applicants considered each to be separately patentable such that each can be considered independent and distinct

Art Unit: 3749

along with the fact that the Office must considered each element under different class and/or subclassification scheme under current Office practice. This consideration represents an undue burden because each of the five independently claimed inventions are grouped that numerous features may or may not be patentable in each of the claimed groups.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-15, 17, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (US 4,154,003). Muller is considered to disclose the claimed invention comprising:

a water tub **12**; and

a drying apparatus **10** provided on an outer surface of the water tub, the drying apparatus comprising:

a condensing duct **16** or **110** provided on a rear surface of the water tub; and

at least one air guide **77**, **80**, **106**, **155**, or **156** to partition an inner space of the condensing duct into a plurality of condensing paths which communicate with each other in series. Muller is also considered to disclose a first air guide **77** or **94** and a second air guide **78** or **96** which are longitudinally arranged in the condensing duct so

Art Unit: 3749

as to partition the inner space of the condensing duct into a first condensing path, a second condensing path and a third condensing path, a condensing nozzle **132** and **150**, a blower duct **38** or **40**, and a blower fan **36** with heater **82**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller in view of Matsumoto et al. (US 5,768,730). Muller is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed ultrasonic atomizing unit. Matsumoto, another washing machine, is considered to disclose an ultrasonic atomizing unit at column 10 lines 1-15. It would have been obvious to one skilled in the art to combine the teachings of Muller with the ultrasonic atomizing unit, considered disclosed in Matsumoto for the purpose of preventing degradation of a pump so cleaning can be effectively accomplished.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller in view of Czech (US 3,274,807). Muller is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed vapor adsorption. Czech, another washing machine, is considered to disclose vapor adsorption at column 3 lines 13-44. It would have been obvious to one skilled in the art to combine the teachings of Muller with vapor adsorption, considered disclosed in Czech for the purpose of purifying a cleaning agent within the washing machine by removing colorants, odors, fatty acids and the like.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References D and E, cited in this action are considered to disclose one or more of the claimed elements of a washing machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 703 308 7570. The examiner can normally be reached on normal weekday business hours (east coast time).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 703 308 1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Smg

November 16, 2004

A handwritten signature in cursive script, appearing to read "Joseph M. Shain".